

WHAT IS CLAIMED IS:

1. A method for selecting an alternate storage path between a server and a storage unit in a storage area network following the failure of an existing storage path, comprising the steps of:  
5 identifying the storage controller of the existing storage path; and  
selecting an alternate storage path that does not include the storage controller of the existing storage path.

2. The method of selecting an alternate storage path of claim 1, wherein the step of identifying the storage controller of the existing storage path comprises the step of identifying the available storage paths between the server and the storage unit.

3. The method of selecting an alternate storage path of claim 1, wherein the step of identifying the storage controller of the existing storage path comprises the step of identifying the logical association between ports and storage controllers of a storage system.

4. The method of selecting an alternate storage path of claim 1, wherein the step of identifying the storage controller of the existing storage path comprises the steps of,  
identifying the available storage paths between the server and the storage units; and  
20 identifying the logical association between ports and storage controllers of a storage system.

5. The method for selecting an alternate storage path of claim 1, wherein the existing storage path is the default storage path between the server and the storage unit.

6. A storage area network, comprising:

a server having a driver;

a storage system, wherein the storage system comprises,

multiple ports;

5 multiple storage controllers, wherein each of the ports is associated with one of the storage controllers;

a storage unit; and

wherein the driver is able to select a storage path between the server and the storage unit and is able to select an alternate storage path in the event that the first selected storage path becomes inoperable, wherein the alternate path does not include the storage controller of the first selected storage path.

7. The storage area network of claim 6, further comprising a table accessible by the driver that includes an identification of the available storage paths between the server and the storage unit of the storage system.

8. The storage area network of claim 6, further comprising multiple storage units accessible by the multiple storage controllers of the storage system.

20 9. The storage area network of claim 6, further comprising, multiple storage units accessible by the multiple storage controllers of the storage system; and

a data source accessible by the driver that includes an identification of the association of controllers and storage units of the storage system.

25 10. The storage area network of claim 6, further comprising a data source accessible by the driver that includes an identification of the association of controllers and storage units of the storage system.

11. The storage area network of claim 6, further comprising a data source accessible by the driver that includes an identification of the association of controllers and storage units of the storage system.

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12. The storage area network of claim 6, further comprising a data source accessible by the driver that includes an identification of the ports through which each storage unit of the storage system is accessible.

[illegible]

13. A method for providing a default and an alternate storage path between a server and a storage system having multiple ports, multiple storage controllers, and one or more storage units, comprising the steps of:

identifying the available storage paths between each server the one or more storage  
5 units of the storage system;

selecting a first storage path between the server and a storage unit of the storage system; and

if the first storage path becomes inoperable, selecting an alternate storage path between the server and the storage unit of the storage system, the alternate storage path including a storage controller that is different than the storage controller of the first storage path.

14. The method for providing a default and an alternate storage path of claim 13, wherein the step of identifying the available storage paths comprises the step of identifying the relationship between the storage controllers and the ports of the storage system.

15. The method for providing a default and an alternate storage path of claim 13, wherein the step of selecting a first storage path between the server and the storage unit of the storage system comprises the step of selecting the default storage path defined for the server and the storage unit.

20 16. The method for providing a default and an alternate storage path of claim 14, wherein the step of identifying the available storage paths comprises the steps of,

identifying the relationship between the storage controllers and the ports of the storage system; and

25 selecting a first storage path between the server and the storage unit of the storage system comprises the step of selecting the default storage path defined for the server and the storage unit.

17. The method for providing a default and an alternate storage path of claim 13, wherein the step of identifying the available storage paths between each server the one or more storage units of the storage system comprises the step of building a table of the available storage paths between the server and each storage unit of the storage system.

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18. The method for providing a default and an alternate storage path of claim 16, wherein the step of identifying the relationship between the storage controllers and the ports of the storage system comprises the step of identifying for each storage controller the ports that communicate to the storage controller.

19. A method for switching from a default storage path to an alternate storage path between a server and a storage system having multiple ports, multiple storage controllers, and one or more storage units, comprising the steps of:

recognizing a failure condition in the default storage path; and

5 selecting an alternate storage path between the server and the storage unit of the storage system, wherein the alternate storage path including a storage controller that is different than the storage controller of the first storage path.

10 20. The method for switching from a default storage path to an alternate storage path of claim 19, wherein the step of selecting an alternate storage path comprises the step of accessing an information source to determine the associations between storage units and storage controllers of the storage system.